

Claims Included within Elected Group

Group 2 specifically includes Claims 10, 12, 41, and 43. In addition, the Examiner indicated that Claims 1, 6-9, 32 and 37- 40 serve as linking claims if Group 2 is elected and the species including a polypeptide is elected in connection with Claim 6 and 37. Accordingly, examination of these linking claims along with examination of the Group 2 claims is appropriate. In addition, Applicants have retained claims to the nonelected inventions of Groups 1 and 3-31, in accordance with M.P.E.P. § 809.04. Upon allowance of the generic, linking claims, the restriction requirement to these linked inventions should be withdrawn. See M.P.E.P. § 809.03, specifically Form ¶ 8.12. Therefore, upon allowance of a generic claim, examination of the remaining claims from Groups 1 and 3-31 must be carried out. See M.P.E.P. § 809.04.

Withdrawn Claims

Claims 77 and 91 have been withdrawn as drawn to non-elected and non-linked inventions. The withdrawal of these claims is without prejudice to the refiling of the subject matter of these claims in one or more divisional applications.

New Claims

Applicants have also introduced new claims 94-113 to the instant application in respect of the elected invention and species. Applicant respectfully submits that the new claims pending to this Amendment raise no new matters for consideration under PCT Rule 13.1, or 37 C.F.R. §1.141, because each of the claims now submitted are linked by the special technical feature of a polypeptide comprising the sequence of SEQ ID NO:2 and nucleic acid encoding such a polypeptide. All pending claims pursuant to the instant amendment expressly require a polypeptide comprising the sequence of SEQ ID NO:2 or nucleic acid encoding such a polypeptide for their performance.

Amended Claims

The changes made to the existing claims by the current amendment, including [deletions] and additions, are shown on an attached sheet entitled **VERSION WITH MARKINGS TO SHOW CHANGES MADE**, which follows the signature page of this amendment. Specifically, Claims 10, 12, 41, and 43 have been amended.

Support for Amendments

In view of the following Remarks, Applicant respectfully submits that the proposed amendments to the claims introduce no new matter to the application and requests that these amendments be entered.

Support for amended Claims 10 and 12 is to be found *inter alia* in Claims 1-9 as originally filed, and in original Claims 10 and 12, respectively, and in the description at page 5, line 29 to page 6, line 27, of the subject specification. Support for amended Claims 41 and 43 is to be found *inter alia* in Claims 32-40, and in original Claims 41 and 43, respectively, and in the description at page 5, line 29 to page 6, line 27, and at page 13, lines 5-6, of the subject specification.

Support for new Claims 94 and 95 is to be found *inter alia* in Claims 1-9; in original Claims 10 and 12; in the description at page 5, line 29 to page 6, line 27; and in the description at page 11, lines 7-16. Support for new Claims 96 and 97 is to be found *inter alia* in the description at page 7, lines 4-8; at page 19, lines 3-4; and at page 23, lines 20-25. Support for new Claims 98 and 99 is to be found *inter alia* in the description at page 7, lines 4-8; at page 11, lines 7-16; at page 19, lines 3-4; and at page 23, lines 20-25. Support for new Claims 100 and 101 is to be found *inter alia* in the description bridging pages 5 and 6; at page 15, lines 4-24; and at page 22, lines 9-21. Support for new Claim 102 is to be found *inter alia* in the description at page 6, lines 1-5. Support for new Claim 103 is to be found *inter alia* in the description at page 7, lines 4-8; at page 19, lines 3-4; at page 11, line 29 to page 12, line 4; at page 21, line 18 to page 22, line 4; and at page 23, lines 20-25. Support for new Claim 104 is to be found *inter alia* in the description at page 21, line 18 to page 22, line 4. Support for new Claim 105 is to be found *inter alia* in the description at page 7, lines 4-8; and at page 23, lines 20-25. Support for new Claims 106 and 107 is to be found *inter alia* in the description at page 11, line 23 to page 12, line 4; at page 21, line 18 to page 22, line 4; and at page 23, lines 20-25. Support for new Claims 108 and 109 is to be found *inter alia* in the description at page 3, lines 17-18; and at page 25, line 5 to page 26, line 16. Support for new Claim 110 is to be found *inter alia* in the description at page 17, lines 28-30. Support for new Claim 111 is to be found *inter alia* in the description at page 17, lines 28-30; and at page 11, lines 1-16. Support for new Claim 112 is to be found *inter alia* in the description at page 15, line 9 to page 17, line 26; at page 22, lines 9-21; and at page 23,

Appl. No. : 09/077,574
Filed : September 24, 1998

lines 20-25. Support for new Claim 113 is to be found *inter alia* in the description at page 22, lines 9-21; and at page 23, lines 20-25.

Conclusion

Should there be any questions regarding the above-captioned patent application, the Examiner is respectfully requested to contact the undersigned at the telephone number below.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated:

17 May 2001

By:

Daniel Altman

Daniel E. Altman

Registration No. 34,115

Attorney of Record

620 Newport Center Drive

Sixteenth Floor

Newport Beach, CA 92660

H:\DOCS\JAH\JAH-4447.DOC
051501

VERSION WITH MARKINGS TO SHOW CHANGES MADE

10. (Three Times Amended) A vaccine composition [according to Claim 9, wherein the
for administration to an animal comprising an immunologically effective amount of a
polypeptide [is GroEL having an] that comprises the amino acid sequence [set forth in] of
SEQ ID NO:2 [or is a protein having at least about 40% similarity thereto] and a
pharmaceutically acceptable carrier.

12. (Three Times Amended) [A] The vaccine composition [according to] of Claim [8]10,
wherein the
polypeptide is encoded by [a polynucleotide] nucleic acid comprising SEQ ID NO: 1 [or a
sequence having at least about 40% similarity thereto].

41. (Twice Amended) A method [according to claim 40 wherein the protein is GroEL
having an amino acid sequence set forth in SEQ ID NO:2 or is a protein having at least
about 40% similarity thereto] of vaccinating an animal against infection by *L. intracellularis*
or related microorganism or treating an animal infected by *L. intracellularis* said method
comprising the step of: administering to said animal an immunologically effective amount of a
polypeptide that comprises the amino acid sequence of SEQ ID NO:2 for a time and under
conditions sufficient to induce a protective immune response against *L. intracellularis*, or related
microorganism.

43. (Twice Amended) The [A] method [according to claim 38] of claim 41 wherein the
[immunogenic component comprises a peptide, polypeptide or protein encoded by a
nucleotide sequence comprising SEQ ID NO:1 or a sequence having at least about 40%
similarity thereto] polypeptide is encoded by nucleic acid comprising SEQ ID NO: 1.

↓
o